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ABSTRACT

This publication summarizes 50 research studies published by the TAFE (Technical and Further Education) National Centre for Research and Development Ltd., Australia. The document is presented in 10 sections. The first section provides an overview of the Centre's work and its publications, describing how best to use them. Sections 2-6 consist of summaries of the year's published research. The materials reviewed are categorized as follows: in-house research/core grant; in-house research/outside funded; commissioned projects; seed research; and miscellaneous publications. Section 7 lists the regular publications, and section 8 lists current research. Section 9 lists conference papers presented by research staff, and section 10 shows which papers were published in journals not produced by the Centre. Each entry in the digest consists of an overview of the research publications followed by bibliographic details: TAFE number author, publication date, title, number of pages, International Standard Book Number, format (paper or microfiche), availability, and price. (KC)

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RESEARCH AND DEVELOPMENT DIGEST -5

A summary of published research by the Centre for the period 1 July, 1989 - 30 June, 1990.

(Including some items in press, for distribution in July/August, 1990.)

Edited by William C. Hall

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Introduction

This *Research and Development Digest* is an annual publication summarising all of the Centre's published research and development reports for the previous financial year (1 July 1989 to 30 June, 1990). These summaries provide the busy reader with an immediate overview of the previous year's published research activities. Also, a copy of the current *Digest*, together with the latest Annual Report will give a good picture of the Centre's role within Australian TAFE. (Both publications are available free of charge from the Centre.)

The *Digest* is divided into ten sections. The first section provides an overview of the Centre's work and its publications, describing how best to use our publications (including the *Digest*). Sections two to six consist of summaries of the year's published research. Section seven lists the regular publications. Section eight lists current research. Section nine lists conference papers presented by research staff and section ten shows which papers were published in journals not produced by the Centre.

The *Digest*, therefore, is part of the wide range of information available about the Centre's research. Because of its key information role, the publication is distributed free of charge. Although much of the *Digest* consists of extracts from research reports, the decision regarding which extracts to use and the editing of the extracts has been the responsibility of the editor, not of the authors of the original reports.

Thanks are expressed to Carol Dungey who assisted with the editing.

1. An Overview

The Centre's research

The Centre is involved in conducting research and development through:

- in-house projects (funded from the core grant)
- outside-funded projects (in-house projects funded externally)
- commissioned projects (funded by the Centre from its core grant)
- seed research (funded by the Centre from its core grant).

Most of the Centre's core grant from the states, territories and the Commonwealth is spent on in-house projects and their associated activities such as workshops and publications. All Centre professional staff conduct research with only a small portion of the budget being spent on administration.

In-house projects are undertaken by Centre staff (or research staff seconded to, or contracted by, the Centre). Outside-funded projects are generally in-house projects which are commissioned by the Centre (each year, over $100,000 are allocated to these). Most commissioned research is undertaken by state or territory TAFE authorities. Seed research is small-scale commissioned research funded by the Centre with the hope that a larger project will develop from the work. This *Digest* describes all four approaches to research.

Using Centre Publications

The Centre is now producing the following types of publications:

- research reports;
- *Research and Development Digest* (this publication);
- *Australian Journal of TAFE Research and Development*;
- Vocational Education and Training Database;
- other publications (eg Annual Report, brochures, publications catalogue, Project Profiles).

Our policy is to make all of our publications available at a reasonable price. Many are free (including Project Profiles and this *Digest*). Also, all of our research reports and *Education and Labour Force Trends* are available on microfiche, free of charge from the Centre. If a report is found to be of particular interest, then a hard copy of it can be purchased from us. Hard copies should also be available in many libraries. Microfiche reader/printers will also produce hard copy from the fiche, and the Centre encourages this use of its research reports. No permission is needed to copy from our microfiche.

Summaries of all of the previous year's published research are contained in this *Digest*. In addition, articles about much of our research are printed in the Australian Journal of TAFE Research and Development, which is available on subscription from the Centre. After reading a research summary, feel free to write for a hard copy or a microfiche of the complete report. Bibliographic information is included in this *Digest* to assist you to do that.

Shorter summaries of all of our completed research are given, and current research is listed, in the Vocational Education and Training Database (available in all TAFE College libraries). Project Profiles are available, free of charge from the Centre, for all current research.

The suggested sequence of events when following our research is as shown below:

(a) read about current research (which is not yet published) in Project Profiles (available from the Centre) or in the Vocational Education and Training Database (available in your library);

(b) read a summary of the completed project in the Database (available in your library), and in this *Digest*;

(c) if you are likely to be interest in the detailed report, obtain a free microfiche from the Centre (or borrow a library hard copy);

(d) scan the microfiche (or hard copy);

(e) copy sections of the microfiche (or hard copy) or purchase a hard copy from the Centre.

Information about all of our publications can be obtained from:

TAFE National Centre for Research and Development Ltd.
252 Kensington Road
Leabrook
South Australia 5060
Telephone: (08) 332 7822, Facsimile: (08) 332 3988.

The Digest entries

Each entry in this *Digest* consists of an overview of the research publications followed by the bibliographic details. The bibliographic details will enable readers to obtain the complete report either as hard copy or as microfiches from the Centre. There is no copyright restriction on the non-commercial use of material from the *Digest*, although an acknowledgement to the Centre is requested.

2. In-house research: core grant

Developing training materials in community and enterprise management for Aboriginal people in remote areas: project report

E. Bourke, H. Guthrie, J. Turker, J. Huggins, S. Wilson

An internal evaluation of a major curriculum materials development project was conducted and a project report written.

The project aimed to produce training materials in the areas of community and enterprise management within a common curriculum framework. The materials are based on the perceived training needs of Aboriginal people in remote communities. The project has also been influential in co-ordinating existing activities in community and enterprise management in the States/Territories. The project has resulted in the development of new training materials for use throughout Australia (see page 17).

The specific objectives of the project were to:

1. undertake a training needs analysis, which would determine the needs of Aboriginal communities in the areas of community and enterprise management, and ensure that the programs are responsive to these needs;

2. review existing programs and materials, develop new training and resource materials, and adapt existing training packages to a form suitable to the requirements of remote Aboriginal communities. The project uses a variety of alternative modes of delivery to suit individual learning needs including the Modular Integrated Training System (MITS);

3. assist existing Aboriginal controlled organisations to develop or expand their capacity to deliver training courses appropriate to the needs and requirements of remote Aboriginal communities by involving key organisations in all aspects of the project.

The intended outcomes were:

- a common curriculum;
- self-paced, modular training materials using appropriate resources; and
- if appropriate, one module developed to include the full range of materials and forms of presentation as an example for further development of other modules. This outcome was to be achieved through the allocation of additional funds.

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Bibliographic details

TD/TNC 21.33

Bourke, E., Guthrie, H., Turker, J., Huggins, J., Wilson, S. (1990)

Developing training materials in community and enterprise management for Aboriginal people in remote areas: project report.

59 pp. + 2 microfiches.

ISBN: 0-86397-126-1

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Managing commercial educational research
W.C. Hall

Commercial educational research is client orientated and outcomes driven. It is applied, having a practical problem to solve. Such research is not new. Many objective tests were produced in the 1930s specifically for use in industry and commerce. Research into the development and use of those tests was conducted.

Industrial trainers have sometimes conducted educational research. For example, they have developed and refined training packages and have experimented with psychological tests.

However, commercial educational research has received a tremendous boost during the past few years, partly because of the Commonwealth Government's strong commitment to training, partly because of industry and award restructuring, and partly because academic educational research has had much of its direct funding dropped.

This book shows the important differences between academic and commercial educational research. The book's main intention is to help those who want to carry out commercial educational research. It is based on the experiences of the TAFE National Centre for Research and Development Ltd. and so examples are drawn from the Centre's work.

Some of the differences between the academic and commercial approaches are summarised below.

ACADEMIC	COMMERCIAL
Researcher-orientated	Client-orientated
Methodology-driven	Outcomes-driven: budget and timetable determined
Theoretical emphasis	Practical emphasis
Validity important; reliability very important	Validity very important; reliability important
Destination open	Destination anticipated
Complete range of techniques employed	Complete range of techniques employed
Medium to long-term in effects	Short-term in effects
Budget a minor consideration	Budget a major consideration
Timetable a minor consideration	Timetable a major consideration
Outcome usually a paper in a refereed journal	Outcome usually a report, sometimes confidential
Credibility easily attained	Credibility difficult to attain
Politics minor	Politics major

Bibliographic details

TD/TNC 20.17

Hall, W.C. (1990)

Managing commercial educational research.

47 pp.

ISBN: 0-86397-070-2

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research & Development Ltd, 252 Kensington Road, Leabrook, S.A. 5068.

Price: $49.00; $33.00 to TAFE agencies.

Getting to grips with industry restructuring
G. Hayton

(Completed in July, 1989, forming part of a series. See page 20.)

The "Getting to Grips With . . ." series has been written for the general reader who wants to understand important trends in vocational education and training.

Each booklet is in two parts. The first part comprises a description of the subject matter in a manner which is intended to be clear to any interested layperson. The second part gives an annotated list of publications for those who want to read further.

This title was produced from the core grant and deals with industry restructuring.

Industry restructuring is a topic frequently discussed in Australia today. While many people have a general idea of what it is, few understand its importance and how it will be achieved. Also, industry restructuring is often confused with award restructuring. Yet all people in our workforce, especially managers and union representatives, will need a good understanding of the process of industry restructuring if it is to be achieved successfully. Australia's economic future depends on the success of industry restructuring.

This booklet aims to give the reader an understanding of industry restructuring by answering three key questions:

- What is industry restructuring?
- Why restructure?
- How is industry restructuring achieved?

A number of case studies are referred to in the discussion of each questions.

Bibliographic details

TD/TNC 22.31

Hayton, G. (1990)

Getting to grips with industry restructuring.

71 pp.

ISBN: 0-86397-038-9

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development, 252 Kensington Road, Leabrook, S.A. 5068.

Price: $9.00.

Guide to the Vocational Education and Training Database

I. Ronis, M. Jones, L. Harris

The TAFE National Clearinghouse Information Network, through the Australian State and Territory Clearinghouses, provides an information service to TAFE providers called the Vocational Education and Training Database.

The database is available in hard copy as well as on computer diskettes. This guide is an introduction to the computerised database and aims to provide instructions on information retrieval methods and a guide to the essential features of the software.

The software used is CDS/ISIS Mini/Micro Version 2.3 developed by UNESCO which runs on IBM and compatible personal computers. The software is used by the Asian Pacific Skill Development Information Network of the International Labour Office (of which the TAFE National Clearinghouse is the Australian node) for the purpose of regional information sharing in vocational, technical, further education and training.

The software is generally referred to as MicroISIS. The database compiled by the ILO regional head office uses the acronym APSDIN. The database distributed by the National Clearinghouse however, uses the acronym VOCED. The data in the APSDIN and VOCED databases are interchangeable, since the same field definition table is used.

Bibliographic details

TD/TNC 18.18

Ronis, I., Jones, M. and Harris, L. (1989)

Guide to the Vocational Education and Training Database.

42 pp.

ISBN: 0-86397-006-0

Format: hard copy.

Availability: National TAFE Clearinghouse.

Price: free.

Education and economics: enterprise activities in TAFE
P. Mageean

Enterprise activities require those involved to operate in new, inventive ways in response to opportunities. This means that there is no single pattern or formula for success: each situation will require its own response. This report therefore does not make specific recommendations as to ways in which TAFE colleges should develop initiatives with industry.

Instead it discusses a number of very different examples of successful TAFE-industry enterprises to provide ideas and models. These are presented in a context which describes how enterprise development in education is being fostered in many developed countries, and why this is happening. It aims to enable readers to gain a wider understanding of the Australian government's push for TAFE to become more innovative in response to industry needs.

This report has been written for those involved in TAFE enterprises whether as developers of saleable intellectual property (such as inventions, ideas, resources, concepts), providers of a course or other service, as negotiators of contracts, marketers of TAFE services or as policy developers concerned with the overall organisation of TAFE and the place and purposes of enterprise activities within this.

Most importantly, the major implications of these enterprises for TAFE are described, and potential and existing concerns discussed. It is hoped that this will assist those responsible for implementing new enterprise development in TAFE to do so with a better knowledge of the potential benefits and problems associated with it, and with some new ideas to build on which may increase their chances of success.

Bibliographic details

TD/TNC 21.29

Mageean, P. (1990)

Education and economics: enterprise activities in TAFE.

59 pp.

ISBN: 0-86397-078-8

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); microfiche (National TAFE Clearinghouse).

Price: $23.00 (hard copy); free (microfiche).

Facilitated appraisal for college executives (FACE)
P. Mageean

FACE is a technique whereby a professional group, the principals/directors of TAFE colleges, can set performance standards and monitor adherence to these standards by those of its members who choose to participate in this process. It does so by providing a format for confidential appraisal, the findings of which can be used to develop an action plan for professional development. Some TAFE authorities are already introducing other forms of evaluation; it is important to stress the professionalism of TAFE staff by developing an alternative voluntary and independent evaluation system which fosters professionalism and staff development.

If it is accepted that a professional person will be self-directing, monitoring and evaluating, then it is important to foster self-assessment. However, individuals do have 'blind spots' and are unlikely to be aware of all the information which would contribute to an evaluation of their performance. A facilitator - a peer, line manager or other appropriate person, may significantly illuminate these blind spots and so contribute to the appraisee's self-knowledge leading to a more accurate and comprehensive appraisal. The very process of discussing performance and professional development needs and plans with another person is also likely to help clarify issues.

This report is particularly concerned with peer appraisal, but a form of peer appraisal in which the peer acts as a facilitator assisting another individual in his/her self appraisal. However FACE may be adapted to other forms of appraisal such as a line manager or without a particular facilitator. The key element is that it is concerned with an individual developing greater insight into his or her professional performance and how that may be strengthened. It is not a model for appraisal by another person or for other purposes such as promotion or tenure decisions.

FACE is based on three fundamental ideas. First, that the keystone of institutional success is the quality of the staff, and in particular because of his/her over-riding influence, of the principal/director. Second, that ongoing professional development is essential for successful performance as a professional and it is therefore reasonable to expect commitment and contributions from both the individual principal/director and his/her TAFE authority. Third, that professionals themselves, with support from colleagues, are the best assessors of their competence and professional needs and that this 'ownership' of the process and outcomes of appraisal will promote their acceptance of, and commitment to, an action plan for professional development which is based upon that assessment.

Bibliographic details

TD/TNC 21.32

Mageean, P. (1990)

Facilitated appraisal for college executives (FACE): a handbook for users.

67 pp.

ISBN: 0-86397-110-5

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); microfiche (National TAFE Clearinghouse).

Price: $30.00 (hard copy); free (microfiche).

Testing times: a study of assessment on- and off-the-job
P. Thomson and P. Pearce

Australian industry is being called upon to make many changes to its established ways of doing things. There are demands for workers not only to be more highly skilled, but also to possess a wider range of skills than they have at present: there are demands that improvements be made in the quality of the goods the country produces: there are demands that changes be made to the way work is organised and that a restructuring of Australian industry should take place in order to facilitate these various changes.

The April 1989 paper 'Improving Australia's Training System' circulated by the Minister of Employment, Education and Training, identified seven major implications of the restructuring process for the vocational training system. One of these is of particular relevance to this report, namely:

> 'the development of competency standards and associated machinery for competence assessment, covering both on-the-job and off-the-job training.'

The development of 'competence assessment covering both on-the-job and off-the-job training' requires some fundamental changes to the way educators and trainers have traditionally done things. Already there is evidence that the competency-based approach to training is beginning to replace the time-serving approach long associated with the apprenticeship system.

This report documents how much progress has been made in the area of assessment, both on-the-job and off-the-job, and how much still remains to be achieved. It argues that at the present time, Australian vocational training is severely handicapped by a lack of good assessment procedures for determining student or trainee achievement. There are many reasons for this state of affairs, but outstanding amongst them is the low level of skills in assessment techniques possessed by many of our teachers and supervisors. This lack of expertise is hardly surprising when we look at the amount of training in assessment techniques that is on offer.

Bibliographic details

TD/TNC 21.34

Thomson, P. and Pearce, P. (1990)

Testing times: a study of assessment on- and off-the-job.

55 pp.

ISBN: 0-86397-134-2

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); microfiche (National TAFE Clearinghouse).

Price: $19.00 (hard copy); free (microfiche).

3. In-house research: outside funded

Towards better management: training materials for Aboriginal and Torres Strait Islander communities

E. Bourke, H. Guthrie, J. Turker, J. Huggins

This project was funded by the Aboriginal Employment and Training Branch of the Commonwealth Department of Employment, Education and Training.

It aims to produce common curricula and training materials in the areas of community and enterprise management for use within remote rural Aboriginal communities. The curricula and materials are based on the identified training needs of these communities. The project thus supports the Commonwealth Government's policy as outlined in the publications entitled 'Aboriginal Employment Development Policy'. It brings together and co-ordinates activities occurring in the states/territories in order to avoid overlap, and develops new training materials for use throughout Australia.

The manual includes:

1. Planning in Your Community
2. Formal Meetings
3. Managing the Office
4. Basic Bookkeeping Procedures
5. Preparing Financial Reports
6. Hiring Staff
7. Community and Government
8. Planning Enterprise Development
9. Setting up the Business
10. Financing the Business
11. Marketing.

A section entitled 'Notes to Trainers' was also produced. In addition, this section of the trainer's manual included a section on running workshops in remote communities.

The trainer's manual also included six resource packages developed from the existing workbooks and the management training workshop manual from the trial edition. The resource packages were entitled:

A. Ideas for Workshops

B. Purchasing Office Machinery

C. Banking - supplementary exercises

D. Basic Business Calculations - supplementary exercises

E. Business Calculations - supplementary exercises

F. Insurance Handbook.

Other resources developed were distributed on a more limited basis. These include the two videos:

- Yandeyarra - A Case Study; and
- Starting a Business.

In addition, a package on computing was prepared. This package consists of series of computer-based exercises on the topics:

- basic operating system skills;
- understanding your computer;
- basic word processing skills; and
- software overview.

An evaluation of the project has been completed (see page 5).

Bibliographic details

TD/TNC 22.29

Bourke, E., Guthrie, H., Turker, J., Huggins, J. (1990)

Towards better management: resource packages.

ISBN: 0-86397-069-9

Format: hard copy.

Availability: local DEET office.

Price: On application.

TD/TNC 22.32

Bourke, E., Guthrie, H., Turker, J., and Huggins, J. (1990)

Towards better management: trainers manual.

ISBN: 0-86397-005-2

Format: hard copy.

Availability: local DEET office.

Price: On application.

TD/TNC 22.33

Bourke, E., Guthrie, H., Turker, J., and Huggins, J. (1990)

Towards better management: workbook.

ISBN: 0-86397-013-3

Format: hard copy.

Availability: local DEET office.

Price: On application.

Getting to grips with skills audits
T.W. Clark

This publication was funded by the Commonwealth Department of Employment, Education and Training. (Please refer to page 9 for general information about the series.)

Industry restructuring and award restructuring are hot topics in Australia today. While most people have a general idea about what these involve, few realize the importance of *skills audits* to the process. Yet for people involved in industrial relations and training, the term skills audit is becoming increasingly familiar. Many individuals within industry, TAFE, unions and employer associations will need to use, or at least understand, the technique in the very near future.

Put simply, skills audits (or skills reviews as they are sometimes called) are an identification of the skills required and held by the workforce. They help enterprises and industries to:

- identify the complete range of skills at their disposal; and
- identify deficiencies in the skills they require.

This information can be used to set corporate objectives, maximize productivity and provide employees with more fulfilling jobs and rewarding career paths.

In the context of industry and award restructuring, however, the process for conducting a skills audit is not so straightforward. This publication discusses appropriate and useful examples.

Bibliographic details

TD/TNC 20.02

Clark, T.W. (1990)

Getting to grips with skills audits.

68 pp.

ISBN: 0-86397-062-1

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $9.00.

Getting to grips with competency-based training and assessment

J. Foyster

This publication was funded by the Commonwealth Department of Employment, Education and Training. (Please refer to page 9 for general information about the series.)

Getting To Grips with Competency-Based Training and Assessment introduces the general reader - who could be involved in training or retraining in any of several roles - to the ideas associated with this form of learning.

One of the points made in the document is that success in carrying out a task depends upon mastering an extensive range of skills. Mastery in the conduct of competency-based training programs should not be expected to follow from reading an introductory document like this. But the reader should become sufficiently expert to understand the development of a competency-based program by someone else with more expertise.

Competency-based training (CBT) requires more planning and management than traditional education. Competency-based training is spreading, despite this 'handicap' of additional planning, because it usually works much more effectively to bring employees to the required skill levels than do traditional methods.

There are five major steps in the development of a CBT program.

- An extensive consultation process is required to identify the skills relevant to the particular position in the given industry.
- The skills which have been identified must then be organized (both intellectually and practically) into appropriate groups from which learning activities can be developed.
- The physical materials upon which the training program are to be based will have to be developed; these are more extensive than those in traditional programs.
- Those administering the CBT program need to prepare themselves for 'teaching' in a style differing significantly from the traditional approach, and they also have to manage some preparation of the learners, who will probably be expecting the traditional approach to teaching/learning.
- There is also a need to maintain rather more detailed records than is customary; this takes some preparation and some time during the operation of the program.

Bibliographic details

TD/TNC 20.01

Foyster, J. (1990)

Getting to grips with competency-based training and assessment.

72 pp.

ISBN: 0-86397-054-0

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $9.00.

Commonwealth programs and Regency College of TAFE - an evaluation

H. Guthrie and J. Bone

This study was commissioned by the Program Review and Income Support Branch of the Department of Employment, Education and Training (DEET) in Canberra. It aims to assess the impact of the various Commonwealth programs for TAFE, and the future development of such programs, by taking a regional "case study" approach. This approach was adopted, firstly, to obtain a spread of institutions in terms both of geography and function within various TAFE systems and, secondly, to concentrate on regions (and institutions within them) which had recently received large injections of Commonwealth infrastructure funding.

In all, five institutions in four states were selected for study. The study concerns the evaluation of the impact of Commonwealth programs and priorities at Regency College of TAFE, a large vocationally-orientated and metropolitan-based college in Adelaide, South Australia.

The objectives specified for this series of five evaluations (and which were outlined in the project brief for the present project) are:

- to examine, as far as possible:
  - the effectiveness of the TAFE Provisions Program within the context of the Program's objectives;
  - the interface between TAFE and other programs delivered by DEET (particularly labour market training programs delivered through the CES network) and the broader policy environment in which TAFE operates; and
- to map a framework for the collection of formative evaluation data with a view to:
  - providing a database for the future development of Commonwealth programs for TAFE; and
  - establishing a benchmark for future effectiveness evaluations.

The major techniques used were:

- the collection, analysis and review of literature, reports and other relevant documentation at the Commonwealth, State and college levels;
- The analysis of quantitative information held on Regency College's database. In some cases these data were re-combined or summarised to ensure that they provided the information needed for the profile of the College;

- interviews with key individuals and groups. These interviews were conducted using appropriate interview schedules and checklists and were conducted with individuals either face-to-face or by telephone. Others involved interviews with groups.

This report provides readers with:

- a context for the present study;
- an outline of the evaluation methodology used;
- a profile of Regency College;
- a discussion of each of the issues the report addressed, in particular:
  - consultation with community and industry clientele;
  - entrepreneurship; and
  - quality of education.

Bibliographic details

Guthrie, H. and Bone, J. (1989)

Commonwealth programs and Regency College of TAFE: an evaluation.

136 pp.

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Approaches to curriculum development
J. Bone and H. Guthrie

This research was funded by the NSW Department of TAFE. A report was written for the NSW Department of TAFE detailing alternative models of curriculum development to assist the Department to choose an appropriate model that will meet the current and future needs for an efficient, effective and streamlined curriculum development process. The report formed the basis of a workshop conducted in Sydney.

The research examined alternative processes for vocational course development in relation to:

- the identification of industrial needs;
- the streamlining of curriculum development processes; and
- the need for flexibility and innovation.

Bibliographic details

TD/TNC 22.26

Bone, J. and Guthrie, H. (1990)

Approaches to curriculum development: a discussion paper.

50 pp.

ISBN: 0-86397-259-4

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: Price on application.

Evaluation of the effectiveness of the Asian and Pacific Skill Development Information Network (APSDIN)

W.C. Hall

The TAFE National Centre for Research and Development was commissioned by the International Labour Office (ILO) to conduct an evaluation study of the effectiveness of the Asian and Pacific Skill Development Information Network (APSDIN) under the guidance of the Asian and Pacific Skill Development Programme (APSDEP) Expert in Information Systems. This study was to be a limited evaluation (involving no travel or face-to-face interviewing, for example) because of the budget.

The evaluation consisted of three main components:

- an analysis of relevant papers;
- production, distribution and analysis of the results of a questionnaire (which had a 95% response);
- an analysis of material submitted.

The main findings from the evaluation are as follows:

. An impressive start has been made in developing the Asian and Pacific Skill Development Network (APSDIN). However, it is only a start; and so it is extremely important that a further development plan be produced.

. Too much was probably attempted in the short time available and so consolidation is essential in the second phase.

. Of special importance to Vocational Training Documentation Centres (VTDCs) was the support and encouragement from APSDIN and host institutions/organisations in many practical ways, including the provision of free materials.

. The planned programme objectives did not give sufficient emphasis to the training of personnel in the development and operation of a VTDC. In particular, more training is needed in computing skills and in information dissemination. (Further workshops are planned for this phase and so this finding may need modifying.)

. APSDIN has not, generally, served as a support service to national agencies in research and planning. However, this could be considered a longer term aim.

. It has been impossible to determine if APSDIN has successfully served as a support service in developing and maintaining vocational training programmes. However, it seems likely that it has not. However, once again, this could be considered a longer term aim.

Bibliographic details

TD/TNC 19.04

Hall, W.C. (1989)

Evaluation of the effectiveness of the Asian and Pacific Skill Development Information Network (APSDIN).

100 pp.

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

National review of TAFE teacher preparation and development - Stage 1A (Skills and competencies required for the 1990s) and Stage 1B (Skills and competencies of existing teachers).

W.C. Hall, G. Hayton, P. Mageean, J. Scarfe

This project was jointly funded by the Commonwealth Department of Employment, Education & Training and by state and territory TAFE agencies. Although not completed, this important project has been included because of its interim (draft) reports and newsletters. A summary of the terms of reference follows:

Stage 1A: To identify the skills and competencies which will be required by TAFE teachers in the 1990s, having regard to the need for an appropriate balance between (a) teaching (and related) skills, (b) vocational specialisation, (c) management skills, (d) skills relevant to TAFE's broader role as an educational service provider;

Stage 1B: To identify the skills and competencies held by present full-time TAFE teachers;

Stage 2A: To develop strategic models for TAFE teacher training and development, which integrate initial training and later retraining/development;

Stage 2B: To develop a strategy to equip teachers with the enhanced skills they require.

For both Stages 2A and 2B, the Centre offered to outline any resource implications. The Centre also proposed process aims:

- keeping all interested groups informed about the progress of the project;
- obtaining feedback from interested groups; and
- disseminating both interim findings and the final results of the project (including conducting national workshops).

A discussion paper (available in July/August), Stage 1 research report (available July/August), literature review (see page 44) and Newsletters (see page 72) are available.

Bibliographic details

TD/TNC 22.30

Hall, W.C., Hayton, G., Mageean, P., Scarfe, J. (1990)

National review of TAFE teacher preparation and development: a discussion paper.

ISBN: 0-86397-291-8

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: Price on application.

TD/TNC 22.37

Hall, W.C., Hayton, G., Mageean, P. and Scarfe, J. (1990)

National review of TAFE teacher preparation and development: Stages 1A and 1B research report.

ISBN: 0-86397-204-7

Format: hard copy; microfiche.

Availability: hard copy (Orders Sections, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); microfiche (National TAFE Clearinghouse).

Price: hard copy (price on application); microfiche (free).

Integrating occupational health and safety into TAFE courses: curriculum topics
R. Hall and P. Mageean

This research was funded by the Occupational Health and Safety Commission. The publication is designed for TAFE curriculum writers. It provides a general overview of occupational health and safety from the perspective of TAFE trade training, and a brief summary of the major health and safety issues which might be encountered by members of the Australian workforce who have been trained by TAFE.

The primary aim of the document is to provide sufficient information to enable TAFE curriculum developers and others involved in curriculum development committees to participate in determining what and where specific occupational health and safety topics should be included in a particular curriculum. However, as this publication provides only a brief summary of the issues, it is not sufficient in itself to form a basis for these decisions. Therefore curriculum development committees should always consult with occupational health and safety experts who know about the particular vocational area.

This is consistent with the suggested specific policies in "Integrating occupational health and safety into TAFE courses policy guidelines" which is another of the three publications in the series which have been developed by the TAFE National Centre for Research and Development:

1. *Integrating occupational health and safety into TAFE courses: policy guidelines (1989)*, Hill, G.L. and Mageean, P., Adelaide: TAFE National Centre for Research and Development.

2. *Integrating occupational health and safety into TAFE courses: curriculum guidelines (1989)*, Hill, G.L. and Mageean, P., Adelaide: TAFE National Centre for Research and Development.

3. *Integrating occupational health and safety into TAFE courses: curriculum topics (1990)*, Hall, R., Mageean, P., Adelaide: TAFE National Centre for Research and Development.

(The first two publications are described in "Research and Development Digest-4".)

The information presented in this publication is in two main sections: a general or core module; and several specific workplace topics.

The general or core module is intended as a 'stand alone' unit to be undertaken by every student at the beginning of the course. It is designed to provide a framework to enable students to:

(a) analyse occupational health and safety issues according to basic principles of prevention and control;

(b) interpret occupational health and safety legislation, including workers' compensation;

(c) identify potential workplace hazards which relate to their occupation and understand the strategies involved in a range of preventive and control measures.

The non-core, specific workplace topics are intended to be integrated throughout the course, where appropriate. These topics can be updated as required to accommodate changes in technology or workplace demands etc. It is expected that TAFE institutions will vary the delivery of these topics to suit the needs of their courses and students.

The non-core topics are accompanied by extensive lists of references to enable the teacher to relate the subject area to a specific trade.

Bibliographic details

TD/TNC 20.18

Hall, R. and Mageean, P. (1990)

Integrating occupational health and safety into TAFE courses: curriculum topics.

145 pp.

ISBN: 0-86397-213-6

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); microfiche (National TAFE Clearinghouse).

Price: $29.00 (hard copy); free (microfiche).

Quality management: principles and techniques
M. Hayes

This research was funded by the Commonwealth Department of Industry, Technology and Commerce. The project is fully described on page 35.

The video program comprises three parts and is accompanied by a teacher's guide (with visuals for conversion into overhead projector transparencies), and student notes.

The first video features Norbert Vogel, Manager, Quality Development for Broken Hill Proprietary Co. Ltd. He presents a definition, eight principles and four requirements for establishing Quality Management in an organisation such as BHP.

The first video is divided into eleven scenes and also introduces a team of actors representing the senior management of a medium sized company. They identify a cash flow problem and decide to tackle it using a Quality Management approach.

The second video shows them dealing with the cash flow problem and introduces flow diagrams, Ishikawa diagrams, run charts and Pareto analysis. There are four scenes in this video.

In the third video, a production problem is identified. This is tackled by systematic data collection and analysis. Techniques for systemic data collection and analysis, construction of frequency tables, histograms, calculation of averages, standard deviations, systems within and outside statistical control and capability of systems are covered. There are four scenes in this video.

Bibliographic details

TD/TNC 19.03

Hayes, M. (1989)

Quality management: principles and techniques.

1 video cassette + 1 teacher's guide (132 pp.) + 60 pp. (loose-leaf).

ISBN: 0-86397-046-X

Format: kit.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $75.00.

The application of computers in technical and vocational education
G. Hayton and P. Loveder

This project was funded by UNESCO.

The study was concerned with the application of computers in technical and vocational education, based on the experience of South Australia's Technical and Further Education system. The study aimed to describe the experience in the use of computers for:

- administration and management of technical and vocational education;
- keeping students' records;
- teachers' use; and
- creating computer-simulated environments.

In addition, the study examined the use of computer hardware and software in technical and vocational education by various groups of users, including:

- central office and college administrators;
- library/learning resource centre staff;
- classroom teachers;
- students.

Bibliographic details

TD/TNC 18.21

Hayton, G. and Loveder, P. (1989)

The application of computers in technical and vocational education: the experience of South Australia.

72 pp.

Format: hard copy.

Availability: inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Training in system control (mechatronic) technology: two case studies

G. Hayton and P. Loveder

This project was commissioned by the National Board of Employment, Education and Training (NBEET) of the Commonwealth Department of Employment, Education and Training.

The project was undertaken by the Centre for Technology and Social Change (TASC) of the University of Wollongong, in collaboration with the TAFE National Centre for Research and Development. The TAFE National Centre undertook two case studies in Adelaide and helped with the section of the main report dealing with training implications.

The full report will be published by NBEET.

Bibliographic details

Hayton, G. and Loveder, P. (1989)

Training in system control (mechatronic) technology: two case studies.

16 pp.

Format: hard copy.

Availability: This interim report is unpublished. Enquiries regarding the final report should be directed to NBEET.

Integrating quality concepts into TAFE courses

G. Hayton, K. Neylon, A. Inglis, M. Hayes

The TAFE National Centre for Research and Development was commissioned by the Department of Industry, Technology and Commerce (DITAC) to develop curricula on 'Quality' for integration into existing TAFE courses. The Department's National Industry Extension Service (NIES) funded the project.

In addition to this final report, the other project outcomes are:

- a brochure on the project;
- a report of the industry survey;
- a summary of the industry survey report;
- a set of three videos with student and teacher notes;
- a summary of this report;
- one day workshops in Australian capital cities in July and August, 1989.

The project is based on a conclusion of the Federal Government's Foley Report that quality issues are at the heart of Australia's economic problems, and that modern approaches to management for quality and improvement require all people within enterprises to be responsible for quality.

The aims of the Centre's quality project were to:

- research the needs of industry with regard to skills in management for quality and improvement and the existing formal training courses;
- design curriculum components in management for quality and improvement which can be integrated into existing TAFE courses;
- develop materials for use in the curriculum components referred to above;
- disseminate to TAFE authorities and TAFE colleges information on the curriculum components and curriculum materials developed;
- make every reasonable effort to ensure acceptance by TAFE colleges of the materials developed under this agreement, principally by liaising with state TAFE authorities and the Australian Committee on TAFE Curriculum;
- evaluate the effectiveness of the curriculum components and curriculum materials produced.

It is important to note from these aims that the project was not concerned with developing separate 'stand alone' quality courses for quality specialists. The central thrust of the project is the integration of modern quality concepts, applicable to industry, into existing TAFE vocational courses. This task is a very large one, having major implications for curriculum development and staff development in TAFE.

Also, the project was not concerned with the quality of TAFE or its courses and teaching. The quality concepts discussed in this report may, of course, be applied to any organisation - including a TAFE college, but this was not a concern of the project.

The videos are described on page 32. The project evaluation is described on page 40.

Bibliographic details

TD/TNC 18.02

Hayton, G., Neylon, K., Inglis, A., Hayes, M.

Integrating quality concepts into TAFE courses.

135 pp.

ISBN: 0-86397-285-3

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); microfiche (National TAFE Clearinghouse).

Price: $25.00 (hard copy); free (microfiche).

Skill analysis of mechanical maintenance employees at Austral-Pacific Fertilizer Ltd.

G. Hayton

This research was funded by Austral-Pacific Fertilizers Ltd.

Austral-Pacific Fertilizers Ltd (APF) is a member of the Incitec group of companies. APF produces a range of chemicals at its Gibson Island works. The chemicals are mainly used as fertilizers for Australian agriculture but a small proportion have other industrial uses.

The aims of the skill analysis, as specified by APF, were:

1. To conduct a skills analysis of the various levels of mechanical maintenance employees by APF.

2. To identify whether any employees meet the definition of Mechanical Tradesperson (Special Class) in the Metal Industry Award.

3. To identify the training required to be given to the identified levels of mechanical maintenance employees if they are to meet the above definition.

4. To identify whether there is a parallel stream(s) of skills to that envisaged by the Mechanical Tradesperson (Special Class) definition in evidence at APF.

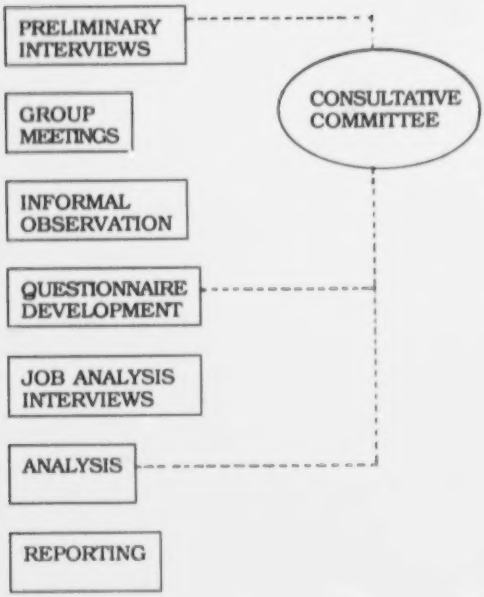
5. If there is, to identify to what (vertical) level that Stream(s) of skill rises and indicate:

   (i) whether it equates in (vertical) skill level to that in the above definition; and

   (ii) indicate what additional training would be required in order that employees in the steam(s) would equate in (vertical) skill level to those in the above definition.

A step-by-step procedure for the skills analysis at APF was developed in consultation with APF (see below).

This project enabled the Centre to test the use of its skills analysis publication "Training for Australian Industry" (published by the AGPS) and to train a Queensland researcher in the use of skills analysis techniques. (The Centre would not normally undertake local projects of this nature.)



Bibliographic details

Hayton, G. (1989)

Skill analysis of mechanical maintenance employees at Austral-Pacific Fertilizers Ltd.

2 v.

Format: hard copy

Availability: This report is unpublished.

An evaluation of the education standing of aircraft maintenance licences

R.W. Kemp

The Centre was approached by The Amalgamated Metal Workers Union, National Research Centre (who funded this project) in June 1989 to undertake a research project with the objectives:

- to analyse and evaluate the educational standing of Aircraft Maintenance licences in comparison and relation with current TAFE post-trade certificate, advanced certificate and/or associate diplomas;
- to categorise the outcome of the evaluation in terms of the proposed MTIA/MTFU career path document for engineering and metal trades employees.

Subsequently, the Centre submitted an offer to the AMWU which was accepted in late July 1989. As part of the submission the Centre agreed to complete the project within one month of contract agreement.

The analysis and evaluation concentrates on two licences categories: airframes and engines related to commercial aircraft regardless of type (of aircraft model).

Bibliographic details

Kemp, R. (1989)

An evaluation of the education standing of aircraft maintenance licences.

36 pp.

Format: hard copy.

Availability: This report is unpublished.

Evaluation of curricula and curriculum materials on quality
P. Loveder and G. Hayton

This report formed part of a wider project funded by the National Industry Extension Service (NIES) of the Department of Industry, Technology and Commerce (DITAC) to research industry training needs in quality and develop curricula on quality for integration into TAFE courses. The project is described on page 35.

The major aims of the evaluation phase of the project were:

- to assess the current impact on TAFE Curriculum of the project on integrating quality concepts into TAFE courses, especially the degree to which the principles of Total Quality Management (TQM) have been incorporated into existing or planned courses;

- to evaluate the 'Quality Management: Principles and Techniques' video training package as a goal for teaching modern quality concepts in TAFE Colleges.

This report summarises the evaluation.

Bibliographic details

TD/TNC 22.02

Loveder, P. and Hayton, G. (1990)

Evaluation of curriculum materials from the project on 'Integrating quality concepts into TAFE courses'.

22 pp.

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Pathways to participation: vocational and further education needs of adult immigrants in rural areas

P. Mageean

This project was funded by the Bureau of Immigration Research to:

- research the vocational and further educational needs of adult rural immigrants, with particular attention to the special needs of women and to the situation in SA;
- consider the policy implications of these findings and to suggest better ways in which adult rural immigrants could be served;
- produce practical recommendations by which educational providers, particularly TAFE, can better meet these needs.

For the purposes of this study 'rural' is defined as living outside the capital cities and other major metropolitan areas of Geelong, Gold Coast, Newcastle and Wollongong, and at least 45 minutes drive from the nearest TAFE college. 'Immigrant' is defined as 'person born overseas who has become a permanent resident of Australia'. This includes both recent arrivals (defined for this study as 'having arrived in Australia within the last 36 months') and longer-term immigrants. Twenty percent of the Australian population were born overseas. Seventy percent of our immigrants have a NESB (non-English speaking background).

Commonwealth Government policies of equal employment opportunity, anti-discrimination and multiculturalism express the right of all Australians, immigrant and native born, to participate fully in education, unhampered by discriminatory barriers. This report looks at how this right can be fostered for rural immigrants.

A corporate goal of the Department of Employment, Education and Training (DEET), is to improve equity of access to employment, education and training and to pursue more equal outcomes. Specifically it aims to improve the relative rate of participation of groups such as rural people and immigrants, who are under-represented in employment, education and training, achieve outcomes for these groups which are more in line with those of the wider community and encourage other governments, employers and communities to assist in increasing their participation and providing better outcomes for these groups.

The information in this report is relevant to policies concerning rural immigrants' access to technical and further education (TAFE). It discusses ways of increasing their participation in education and training, and so of providing them with skills which will assist them to find employment, or lead to other outcomes which they want. These outcomes may include English language skills which would enable women who are not in the paid workforce to participate more fully in the Australian community.

Bibliographic details

Enquiries should be directed to the Bureau of Immigration Research, 33 Lincoln Square South, Carlton, Vic. 3053.

Skills analysis of paint manufacturing laboratory staff
S. Mitchell, R. Clark, G. Hayton

This research was funded by the Australian Paint Manufacturers' Federation (APMF).

Payment of the 'first tier' in October 1989 signalled the first stage of the award restructuring process for the federal industrial award covering laboratory staff in paint manufacturers. A skills analysis of laboratory staff and evaluation of relevant courses for laboratory staff were to provide a basis for award restructuring. Progress was to be reviewed by the Industrial Commission in April, 1990, to enable payment of the second tier.

The project aims were:

1. to identify the competencies or skills required for paint industry laboratory staff covered by the existing award;

2. to analyse the skills required to identify job types, job design, skill levels, training and career paths;

3. to develop a syllabus evaluation procedure and evaluate five selected syllabuses.

It was agreed that the project would consider all laboratory jobs up to, but not including, professional level. That is, laboratory jobs requiring training up to the level of a TAFE Associate Diploma (para-professional level) would be analysed. In addition, the relationships with jobs outside this range (e.g. laboratory supervisor or chemist) would be identified in the project.

Bibliographic details

TD/TNC 22.03

Mitchell, S., Clark, R., Hayton, G. (1990)

Report on the skills analysis of laboratory staff in the paint manufacturing industry.

35 pp.

ISBN: 0-86397-158-X

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

National review of TAFE teacher preparation and development: literature review

J. Scarfe

This research was jointly funded by the Commonwealth Department of Employment, Education and Training and by state and territory TAFE agencies. The project is fully described on page 28.

A review of recent literature was undertaken as part of the larger project. The review suggests that during the next decade the TAFE sector will be characterised by the following:

- a stronger sense than currently of being one component of the national and local vocational educational and training system. This will be evident in numerous ways: formal mechanisms to ensure training is "industry-driven"; formal recognition of and articulation between TAFE, industry, secondary and higher education courses; recognition of appropriate on-the-job training and prior experience; co-operative arrangements between TAFE and industry in the delivery of courses, including TAFE fee-for-service courses for industry and TAFE delivery in industry premises;

- increasing variety in teaching methods as well as venues, particularly with increased prevalence of computer-assisted and computer-managed learning;

- more flexibility in both course design and delivery, allowing a self-paced approach, flexible entry and exit points, and client-specific programs;

- a move towards associating competence with demonstration of skills rather than time served (competency-based);

- development of a revenue-generating capacity, particularly through fee-for-service arrangements with industry in such areas of TAFE expertise as course development and delivery;

- a substantially different industrial relations situation for TAFE teachers, with the implementation of award restructuring;

- a student population of greater diversity, as result of social change (e.g., employment of women and other under-represented groups in a far wider range of occupations and industries; higher school retention rates) and industrial change (award restructuring, increased industry commitment to training).

This (draft) report covers Stages 1A and 1B of the project. A final report covering all four stages will be available in February, 1991.

Bibliographic details

TD/TNC 22.27

Scarfe, J. (1990)

TAFE teaching: what the literature says.

ISBN: 0-86397-267-5

Format: hard copy.

Availability: Orders Sections, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $11.00.

Metal fabrication item bank
P. Thomson

The questions in the Metal Fabrication Item Bank have come from a number of sources. The majority were originally collected by members of the National Common Core (NCC) Task Force in Metal Fabrication. The Task Force requested copies of tests and examinations used by their colleagues around the country. These were subsequently classified into content areas corresponding to those of the NCC curriculum document. Bound copies of the questions were then made available to teachers in the states and territories during 1984.

Although the Task Force's bank was a useful resource it consisted of questions only. There were no answers or marking schemes provided with the questions. This meant that the original collection of questions was unable to give teachers and trainers an indication of the standard of performance to be expected of the students.

The TAFE National Centre successfully applied for a grant from the Australian Committee on TAFE Curriculum (ACTC) to remedy this deficiency. With the assistance of some members of the Task Force answers have been prepared for the items in the original collection and these now make up the bulk of the accompanying computerised item bank.

In addition, questions which formed part of another Centre project have also been included. This second collection of items comes from three main sources. These are:

- questions currently used in Metal Fabrication tests in New South Wales;
- questions set by the Australian Welding Institute (published in the Australian Welding Journal); and
- questions developed by members of staff of the TAFE National Centres.

(For a general description of item banks, see page 53.)

Bibliographic details

TD/TNC 22.28

Thomson, P. (1990)

Metal fabrication item bank.

2 v. and 4 computer diskettes.

ISBN: 0-86397-299-3

Format: kit.

Availability: Orders Sections, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $300.00.

Articulated training: models for the building industry - Vols. 1, 2 and 3

L. Wallace, G. Hayton, H. Guthrie, A. Brown

This research was commissioned by the Building Research and Development Advisory Committee (BRDAC) of the Department of Industry, Technology and Commerce (DITAC) to develop a suggested model of training for the building industry. The project also was supported financially by the Australian Committee on TAFE Curriculum (ACTC).

Throughout Australia there are a number of critical industries either contemplating or undergoing considerable structural changes. One of these is the building industry. An important part of such structural change is the change needed in the training system to support the way the industry will eventually be structured.

The project objectives were to document existing training and to provide suggested models of training for the building industry and these were achieved in two stages as follows:

> Stage 1 established a suitable database (the analysis of other research and work of relevance to the project; the current training system, including information on courses, delivery, entry prerequisites, qualifications gained and accreditation processes) highlighting the differences between States and the extent to which previous qualifications and experience are recognised when studying for higher levels of qualifications;
>
> Stage 2 through case studies and extensive consultation, developed suggested models of present and future training for consideration by TAFE and industry.

During the First Stage, the Centre identified aspects of the industry structural relationships that were relevant to the development of the models, and produced a plan for taking them into consideration in the second stage, including outlining the complex liaison and consultation procedures to be followed.

In the Second Stage, the consultation involved:

- meetings of the project advisory committee;
- other meetings of the project team and industry representatives;
- submissions;
- comments on the draft report.

The training models were developed from information obtained from:

- . the state databases of training;
- . the literature review;
- . the case studies;
- . the submissions.

Bibliographic details

TD/TNC 19.01

Wallace, L., Hayton, G., Guthrie, H., Browne, A. (1989)

Articulated training: models for the building industry.

3 v.

ISBN: 0-86397-037-0 (set)

Format: hard copy; microfiche.

Availability: Vol.1 hard copy with vols 2 & 3 microfiche (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068); 3 vols microfiche (National TAFE Clearinghouse).

Price: $20.95 (hard copy); free (microfiche).

4. Commissioned projects

Computer integrated manufacturing: physical modelling systems design

R. Baker

The main aim was to prepare a report and specification together with recommendations for functional CIM Physical Modelling Systems Design in the educational environment.

Physical modelling provides a flexibility and configurability which encourages continuous adaptation to change over time and permits demonstration of different manufacturing strategies and their appropriateness for different circumstances. Such adaptation requires the involvement, co-operation and participation between peers and staff of all relevant teaching schools, divisions and TAFE central office.

It is important to impart an understanding of the central role of information transfer in manufacturing and the context of different aspects of manufacturing such as costing, purchasing, design, scheduling, manufacturing resources planning, value engineering, just in time production, total quality management, etc.

The report encourages the need for inter-disciplinary skills on the mechatronics interface with hands-on experience. It encourages natural adoption of integrated manufacturing by practising the philosophies of Total Quality Management and World Class Manufacturing. It places an emphasise on maintenance with practice in diagnosis, anticipation, prevention and planning. It emphasises the dynamics of human participation and co-operation in technical systems.

Bibliographic details

TD/TNC 22.01

Baker, R. (1990)

Computer integrated manufacturing: physical modelling systems design: a personal view.

134 pp.

ISBN: 0-86397-150-4

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Reskilling Rita
J. Binns

This report provides a national overview of TAFE women's access courses and documents their successful outcomes. At the same time, gaps in the provision of women's access courses are identified. New Opportunities for Women (NOW) is the largest access course in terms of number of students and geographical spread. As such, it provides the basis for this report; however, it is believed that results can be extrapolated to other women's access programs.

NOW courses are offered in NSW, SA, WA, Tasmania and the ACT. Equivalent courses, variously named, are offered in Victoria and, on a limited basis, in Queensland. While TAFE colleges are the principal venue, courses are also offered through TAFE learning centres and some neighbourhood learning centres. These provide women with an alternative point of access to NOW and other re-entry programs. Many women, particularly those who are isolated in the home with small children, prefer to re-enter the education system via learning centres. Learning centres, both TAFE and community run, also enable access courses to be offered as outreach programs in rural areas.

Access courses have been made available, often as a result of co-operative arrangements between TAFE and outside organisations, to women with special educational needs - Aboriginal women, women from non-English speaking backgrounds (NESB), socially disadvantaged women, deaf women, female prisoners and sole parent pensioners. Such organisations include the federal Department of Employment, Education and Training (sole parents and long-term unemployed women) and its State equivalents, and Departments of Community Services (socially disadvantaged women), Aboriginal Affairs and Corrective Services.

This project was concerned with answering the question: "Access to what?". The current research confirms findings from earlier studies undertaken in many States. Women progress, in the main, from access programs such as NOW to TAFE courses in the traditional female areas of office/clerical, fashion, childcare and community services. Therefore, as well as encouraging women to enter non-traditional areas, their traditional fields of study must be adequately resourced and provide scope for higher-level qualifications. Barbara Pocock's comprehensive report of women and TAFE (published by the Centre) makes it clear that traditional female study fields lag behind the trade areas on both these counts. This situation must be redressed if traditional female courses are to provide women with the educational qualifications and occupational skills needed to secure entry to the primary labour market and to contribute to the needs of a changing economy.

Bibliographic details

TD/TNC 18.12

Binns, J. (1989)

Reskilling Rita: women's access to TAFE in Australia: an evaluation of re-entry courses for mature-age women and their links to further study and employment.

129 pp.

ISBN: 0-86397-149-0

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.); microfiche (National TAFE Clearinghouse).

Price: $19.95 (hard copy); free (microfiche)

Cookery item bank
Fashion item bank
S. Dean, S. Findlay, G. Hawke, L. Kittel, G. Millingham, P. Thomson

An item bank is a collection of test questions together with an appropriate system for storage and retrieval. Each item or question is classified in such a way that it is possible to withdraw questions on specific topics from the storage system with a reasonable degree of precision.

The analogy with a real bank is a good one. Over time we deposit our money in a variety of forms (cheques, notes, coins etc.) and when we make a cash withdrawal we can specify the various denominations of notes and coins we require. So it is with the cookery item bank. Over 1000 items have been deposited in the cookery bank and over 800 in the fashion bank and are available for withdrawal and use by teachers and trainers.

Unlike most item banks currently used in Australia, these are computerised and the items are accessible through a simple menu program. This program enables teachers and trainers to view and print the questions and answers they select from the bank.

During the compilation of the banks it became apparent that some differences exist between the states and territories; for example, terminology differs as does the emphasis placed on various parts of the syllabus. This means that occasionally some users will need to modify questions in order to make them appropriate for their particular state or territory or, for that matter, their particular teaching style.

(See also the project described on page 46.)

Bibliographic details

TD/TNC 21.30; TD/TNC 21.31

Dean, S., Findlay, S., Hawke, G., Kittel, L., Millingham, G., Thomson, P.

Cookery item bank; Fashion item bank.

2 v. + 3 computer diskettes (each kit).

ISBN: 0-86397-094-X; 0-86397-102-4

Format: kit.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $250.00 (each kit).

(These projects were partly completed in-house.)

Redressing the balance: the role of TAFE in Aboriginal education

A. Ensor

The major aims of the project were:

- to review the current participation rates of Aborigines in TAFE courses;
- to identify strategies which may give rise to increasing the number of Aboriginal people in TAFE vocational courses;
- to make recommendations on ways in which TAFE can facilitate people of Aboriginal descent gaining access to TAFE courses.

The issue of Aboriginal education has attracted considerable attention in recent years. As a consequence, there exists a large body of documentation containing recommendations for improving educational opportunities for Aboriginal Australians.

Although these reviews have been commissioned by relatively diverse interest groups, they share a number of common perceptions regarding the current status of Aboriginal education generally, and about the role of TAFE in particular.

It is evident that Aboriginal participation in both compulsory and post-compulsory education is considerably lower than for all Australians. People in the 18-24 year age group are the most severely educationally disadvantaged and this disadvantage is experienced more by Aborigines living in remote areas than in populated areas.

Furthermore, in spite of TAFE's unique potential for vocational training and education, there is clear evidence that Aboriginal participation in TAFE reflects the same unacceptably low rates as for other educational sectors.

The strategy considered most effective for the research was to conduct four separate but interrelated studies, each of which focused on a particular aspect of the overall project.

- The first component required the collection of information relating to the current participation patterns of Aboriginal students in TAFE courses throughout Western Australia.
- The second element involved a survey of students enrolled in the TAFE Aboriginal access course to determine the nature and extent of problems experienced by Aboriginal students. In addition, information about the education and occupational aspirations of Access students was also obtained.

- The third study consisted of a survey of TAFE teaching staff, the purpose of which was to identify the major barriers to increased Aboriginal participation in TAFE mainstream courses from a teacher perspective.

- Finally, a workshop was conducted with Aboriginal education workers, TAFE liaison officers, teachers and principals from remote areas of the State which focused on the special needs of rural Aborigines and the secondary school/TAFE link for Aborigines.

Bibliographic details

TD/TNC 18.23

Ensor, A. (1989)

Redressing the balance: the role of TAFE in Aboriginal education.

66 pp.

ISBN: 0-86397-165-2

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.); microfiche (National TAFE Clearinghouse).

Price: $14.95 (hard copy); free (microfiche).

TAFE college councils: strategies for increased effectiveness

C. Henderson

Australian TAFE systems are under considerable pressure from government, industry and unions to include in their educational programs a more significant input from industry. A number of mechanisms by which this objective may be met already exists, including college councils.

This study surveyed the operation of existing councils from the perspective of college administrators, by means of an extensive questionnaire; and from the perspective of members of a number of councils which were selected on the grounds of their perceived effectiveness, by means of interview. The data collected were analysed using a variety of statistical techniques, including measures of association (Chi-square and correlation) and analysis of variance.

One of the most conspicuous features to emerge from the study was a recognition of the uniqueness of individual councils. This uniqueness appears to be a function of the individual membership, the college adminstration, and the interactions of the last two groups within the context of the rules or regulations governing the powers, functions and duties of councils in each state or territory.

This unique character is clearly part of the fabric of each college and should be maintained, but at the same time it was evident from the research that most colleges were not making full use of the competencies of their councils.

Analysis of individual college councils which appeared to be consistently effective revealed a number of common strategies. Among those closely associated with successful councils were: well defined council goals; the provision of orientation and/or staff development for council members; membership representative of the college community; and, the development of a genuine partnership between college administrators and the council. Numerous other strategies were also identified, but these were less strongly associated with successful councils.

It is believed that most of the strategies identified could be implemented relatively simply, although they may need to be accompanied by some attitudinal changes.

Bibliographic details

TD/TNC 21.01

Henderson, C. (1990)

TAFE college councils: strategies for increased effectiveness.

101 pp.

ISBN: 0-86397-379-5

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.); microfiche (National TAFE Clearinghouse).

Price: $32.00 (hard copy); free (microfiche).

Student selection procedures: business studies
M. Thompson and Z. Krzemionka

The South Australian Department of Employment and Technical and Further Education (DETAFE) had been investigating ways in which its colleges could be assisted in the selection of students since 1986. The initiative for these developments was taken by the Student Services Unit, currently part of the Programs Division in DETAFE. Changes in the environment such as resource constraints, increases in demand for TAFE courses and the need to measure more effectively a student's ability to manage course material, gave the impetus to develop procedures which would maximise the student's potential for success while at the same time ensuring that access and equity principles were addressed.

The business studies project is, therefore, the product of several developments in the area of student selection. The early phrases grew out of a general concern about student selection and led to some preliminary investigations into the use of preferred client profiles.

Following the successful trialling of a selection model for the tourism and hospitality courses, a discussion paper was produced resulting in the development of a Departmental policy which was adopted in April 1988. This policy is now being implemented in TAFE colleges in South Australia.

The aims of this project were to:

- develop a model for student selection for business studies courses which would be suitable for implementation nationally;
- develop student entry profiles for a number of different business studies courses;
- develop appropriate selection criteria for these courses;
- develop appropriate instruments to assess students' preparedness and suitability to successfully undertake these courses;
- evaluate the effectiveness of the student selection procedures.

Bibliographic details

TD/TNC 22.06

Thompson, M. and Krzemionka, Z. (1990)

Student selection procedures: business studies.

120 pp.

ISBN: 0-86397-117-2

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: $26.00.

The vocational education needs within TAFE of people with a physical or a sensory disability

D. Meadows and K. Tronc

The aims of the study were as follows.

1. To summarize the special provisions presently available for the particular needs of people with disabilities with particular reference to:

   (a) their integration within normal classes; and

   (b) their future employment.

   These special provisions to include:

   - curricula and the management of the curricula
   - design of facilities
   - provision of counselling
   - TAFE lecturer in-service development (to cover attitudes as well as knowledge and skills).

2. To summarize the legal aspects of teaching people with disabilities as they apply to TAFE colleges.

3. To identify major issues for research needed into vocational education needs of persons with disabilities.

The focus of the study was on the participation and the needs of persons with a sensory or a physical disability in mainstream TAFE vocational courses and not on special programs for persons with an additional disability; for example, an intellectual disability, as this had been the focus of a study undertaken by the Commonwealth Department of Community Services and Health.

This study sought the views of both the providers and disabled recipients of TAFE mainstream programs. Although little data were collected on the participation rates for the groups under review, it would appear that the problems associated with meeting the needs of this group have resulted in a lower than expected enrolment. The program providers are naturally concerned with the provision of funding in the form of designated grants in order to meet the needs of disabled students. The consumers on the other hand, feel that all too often the system used to meet their needs is ad hoc, influenced by prevailing exigencies and has little regard for future planning. Although many individuals throughout the TAFE system in Australia are caring and sensitive to the needs of students with sensory and physical disabilities, it appears that more support at an organisational level is essential if participation rates for these groups are to improve.

Bibliographic details

TD/TNC 22.04; TD/TNC 22.05

Meadows, D. and Tronc, K. (1990).

The vocational education needs within TAFE of people with a physical or a sensory disability: full report; summary report and legal issues.

186 pp.; 27 pp.

Format: hard copy.

Availability: full report (inter-library loan from the National TAFE Clearinghouse); summary report (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.).

Price: full report (LAA voucher (non-TAFE); free (TAFE)); summary report ($10.00).

A guide to flexible/multi-use accommodation in Australian TAFE colleges
J. Sharpe

This document forms the third and final part of a project to "Examine the Variety and Use of Flexible/Multi-Purpose Facilities in Australian TAFE Colleges".

Section 1 consists of a discussion of the concept of multi-use. A couple of definitions are suggested, the different approaches adopted by state TAFE authorities to multi-use are commented on, and the important issue of management is reviewed. Also included are summarised findings from a survey on multi-use facilities held at the end of 1986 (Part 1 of the project) and from a seminar on the topic held in Sydney in June 1987 (Part 2 of the project). The full reports on the survey and the seminar are available from Planning Division, NSW Department of Technical and Further Education.

Section 2 is the Resource Manual proper. It includes examples of designs of multi-use facilities, with illustrations of storage layouts, and of examples of furniture and equipment that have a multi-use function or can be used in multi-use facilities.

The examples illustrated do not cover all types of multi-use facilities or all the associated types of furniture and equipment, nor are they meant to. The manual is to be used as a resource document - hence its loose leaf format, and the sketches are to be added to, updated, and altered or commented on as necessary. For planners, designers, architects and engineers it can be used as a guide to ideas that have been tested elsewhere, as a starting point to design concepts and to store information on multi-use.

Bibliographic details

TD/TNC 19.05

Sharpe, J. (1987)

A guide to flexible/multi-use accommodation in Australian TAFE colleges.

140 pp.

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

5. Seed research

Coalmine management training requirements
D. McGee

The project set out to gain information about the current status of the training and education of practising managers of underground coal mines throughout Australia with a view to determining where and how they were trained and to have them make an assessment of the adequacy of such training to meet the challenges of coalmining in Australia into the next century.

The issue currently facing state government regulating bodies is the lack of reciprocity between states in recognising the statutory qualification held by coal mine managers and a general lack of information about the relevance of their training and education to the current job profile.

This information-gathering exercise (by personal interview with practising managers and with authorities in each 'coalmining state') was seen as a first step in a major project with the Australian Coal Association to evaluate the appropriateness of current educational programmes and industry training to maintaining and improving the high level of safety and productivity in the Australian coal industry.

Bibliographic details

TD/TNC 21.44

McGee, D. (1989)

Coalmine management training requirements.

58 pp.

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Opening channels: development of industry links with TAFE to identify areas of skill shortages

A. Rutter

The seed grant enabled Box Hill College of TAFE to make major inroads into the identification of skill shortages in the information technology industry within the Eastern Metropolitan Region of Melbourne.

In particular, it enabled the following to be achieved:

a) the purchase of a computer software program entitled "Australia on Disc". This program enabled them to commence work on an industry data base;

b) the appointment of a consultant to advise on the questionnaire design and method of data collection for a training needs analysis;

c) the bringing together of key people within the region to pool their knowledge and expertise and provide direction to the project;

d) the running of a seminar/workshop for a specific group of industry people to address skill shortages in the electronics industry, and to present solutions.

Bibliographic details

Rutter, A. (1989)

Opening channels: development of industry links with TAFE to identify areas of skill shortages.

5 pp.

Format: hard copy.

Availability: National TAFE Clearinghouse.

Price: free

Towards effective skill training environments: an investigation of process variables in metal fabrication workshops

A. Taggart and G. Collins

The national impetus given to skill training over recent years has impacted greatly on both industry and educational institutions providing skills training. Whereas the need for effective skills training is clearly recognised, little research has been conducted to identify the characteristics of effective skill training environments in the workshops of educational institutions.

This study identifies the process variables that occurred in three workshop sessions for apprentices in metal fabrication workshops. Firstly, the results indicate the proportion of time that apprentices spend productively engaged in workshop settings, and secondly how apprentices of different skill levels in the same classes vary their levels of productive engagement. The implications of these findings for the development of effective skill training environments are discussed.

Bibliographic details

Taggart, A. and Collins, G. (1990)

Towards effective skill training environments: an investigation of process variables in metal fabrication workshops.

14 pp.

Format: hard copy.

Availability: Inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

6. Miscellaneous publications

Speeches by TAFE directors - 1988
P. Curtin (Ed.)

Speeches by three TAFE directors are included.

Dr Allan Pattison

1. When is an engineer not an engineer?
2. TAFE's role as a modern educational provider.
3. Technical and scientific education and training: girls and women.
4. Education, quality and economic growth.
5. Institution/industry relations: mutual benefits.
6. TAFE and local government labour markets.

Mr Trevor J. Leo

7. The changing face of TAFE in Australia.

Mr Norman W.F. Fisher

8. The economics of multiculturalism: an education and labour market perspective.
9. Woden College of TAFE graduation ceremony address.
10. Education and training for a professionalised Commonwealth Public Service.

Bibliographic details

TD/TNC 18.24

Pattison, A., Leo, T. and Fisher, N.; Curtin, P. (ed.) (1989).

Speeches by TAFE directors, 1988.

87 pp.

ISSN: 1032-0717

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.); microfiche (National TAFE Clearinghouse).

Price: $27.00 (hard copy); free (microfiche).

About the Centre
W.C. Hall

This is a new edition of a free booklet which explains the structure and administration of the TAFE National Centre for Research and Development.

Bibliographic details

Hall, W.C. (1989)

About the Centre. (4th ed).

15 pp.

ISBN: 0-86397-041-9

Format: hard copy.

Availability: Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.

Price: free

New directions in TAFE
W.C. Hall

This is a chapter from D'Cruz, J.V. and Langford, P.E. (Eds.) (1990). Current issues in Australian education. Melbourne: Longman.

Since the 1970s, TAFE has grown numerically and has grown in stature. It enjoys increasing professional status within the educational world, and also within the world of industry and commerce. It is presently facing more challenges than it has faced in the whole of its short history. As a consequence, it will undergo major changes over the next few years. In making those changes, it is hoped that its main reason for having been created will not be forgotten: lifelong education for everyone.

Bibliographic details

TD/TNC 18.14

Hall, W. (1989)

New directions in TAFE.

27 pp.

Format: hard copy.

Availability: inter-library loan (National TAFE Clearinghouse).

Price: LAA voucher (non-TAFE); free (TAFE).

Initiatives in technical and further education: issues 1-10 (consolidated volume)
M. Jones and P. Curtin (Eds.)

The Australian Technical and Further Education (TAFE) Clearinghouse system was established by the (then) Conference Directors of Technical and Further Education in November 1978. The Clearinghouse product was Initiatives in Technical and Further Education. The six State and two Territory Clearinghouses, linked together by the National TAFE Clearinghouse, are responsible for disseminating information in and about TAFE by accessioning documents and distributing copies of these in response to requests.

The National Clearinghouse has responsibility for co-ordinating the system and, in particular, for publishing the gathered information in hard copy as well as making it available in machine-readable, database format.

Approximately 80% of the records in this cumulated volume are on the *Australian Education Index*. Links with other clearinghouses, such as the *Educational Resources Information Centre (ERIC)* have been established also.

The objectives of the National TAFE Clearinghouse Information Network are to:

- give TAFE and training staff greater access to TAFE and training material of both national and international coverage
- encourage initiatives in TAFE
- provide the opportunity for material produced by TAFE and training staff to be disseminated on a national and international basis
- prevent duplication of research and other initiatives, thus reducing wastage of resources.

Types of material and information disseminated includes:

- research reports; technical reports
- evaluation studies; feasibility studies
- curriculum materials (these may include syllabus documents; student materials; textbooks; teacher's guides; audio visual materials; tests, etc.)
- policy documents
- questionnaires; survey results
- workshop/seminar/conference proceedings

- theses; teacher contracts
- bibliographies; catalogues.

Bibliographic details

TD/TNC 18.19

Jones, M. and Curtin, P. (Eds.) (1989)

Initiatives in technical and further education, issues 1-10 with cumulated indexes.

463 pp.

ISBN: 0-86397-381-7

Format: hard copy; microfiche.

Availability: hard copy (Orders Section, TAFE National Centre for Research and Development Ltd., 252 Kensington Road, Leabrook, S.A. 5068.); microfiche (National TAFE Clearinghouse).

Price: $40.00 (hard copy); free (microfiche).

Newsletters

The Centre publishes newsletters on topical issues. Two series of newsletters published in 1989/90 were:

National review of training and development needs of TAFE teachers newsletters 1, 2, 3 (edited by W.C. Hall)

Industry restructuring newsletters 1-6 (edited by P. Loveder).

7. Regular publications

The following publications were published during the year:

- *The Australian Journal of TAFE Research and Development*, 4 (2) May 1989, 5 (1) December 1989 and 5 (2) May 1990
- *Vocational Education and Training Database*, No. (1) September 1989, (2) December 1989, (3) March 1990 and (4) June 1990
- Hall, W.C. (ed.) *Research and Development Digest 4*, August 1989
- *Annual Report 1989-90*, October 1989
- *Education and Labour Force Trends (1989)*. Centre for Research in Education and Work (CREW).

8. Current research

At the start of the 1990/91 financial year, the following Centre projects were being conducted. Other projects will be started as the year progresses. To keep informed of all current projects, please refer to the National Clearinghouse data base.

Project profiles on each project are available (free of charge) from the Centre.

In-house projects: core grant

- Training for integrated manufacturing: case studies
- Improving effectiveness
- Approaches to providing multiple entry and exit points for SA TAFE Associate Diplomas
- Industry restructuring and the implications for TAFE
- New teaching technologies handbook
- Performance indicators in TAFE
- Effects of retention to Year 12 on TAFE Curriculum
- Implementation of a procedure for granting advanced standing for relevant work experience
- Development of selection procedures based on the characteristics of superior job performance
- Monograph on skills audit techniques
- Educational implications of skill-intensive production strategies
- The TAFE market in industry
- Directory: Employment and Training Organisations
- Identification of key technologies
- Teaching in a TAFE college (revised edition)
- Developmental performance indicators performance management

In-house projects - outside funded

- Skill transfer teaching material
- Getting to grips with... on the job assessment
  ... on the job competencies
- National review of TAFE teacher preparation and development
- Inventory of competency-based approaches in TAFE vocational courses
- On-the-job printing materials (Phase II)
- Trainer program for industry
- Award restructuring journal insert for TAFE teachers
- Learning guides manual
- Child care item bank
- Skills recognition in Australia Vol.2: a guide to trades occupations
- Testing and evaluation of students' competence in technical and vocational education

Commissioned projects

- Measurement of facilities utilisation in TAFE
- Assessment procedures clearinghouse
- Comparative study of "mixed mode" or "fleximode" course delivery against "face to face" course delivery in TAFE
- Student selection procedures
- Graduate destination survey
- Review of TAFE student services
- Industry restructuring case study: the implications for TAFE
- Competency-based self-paced learning systems
- Award restructuring: human and physical resource implications for TAFE
- Predictors of success in TAFE courses
- Successful females in manufacturing
- Industry liaison: guide for TAFE officers

Seed research

- Study of interactional process and outcomes of the selection interview
- An investigation of the science content of trade curricula
- Work study education in ACT TAFE courses
- Adapting existing software in manufacturing systems to specific requirements in the textile industry
- Educational needs of rural women in North-West Victoria
- Workplace English for deaf students
- Marketing of TAFE learning resources centres to industry
- Graded criterion-referenced assessment
- Documentation of the development, delivery and effectiveness of training developed by the Loddon Campaspe College of TAFE for retrenched workers
- Communication skills centres
- Integration of computer managed learning (CML) into TAFE courses: an investigation of the best method to implement CML into various courses
- "Mentor" approach to training for industry
- Distance education - training of trainees
- TAFE teachers in corrections - induction video
- Changing attitudes to work practices
- Adult basic education students needs and training strategies
- On-the-job competency based assessment

9. Conference papers presented

Research staff delivered the following papers at conferences:

Guthrie, H.

- 'Training for Prosperity'. Keynote address at the National Printing Industry Training Committee (NPTTC) Symposium, Sydney, October, 1989.
- 'Performance Indicators for TAFE Colleges: Poison, Placebo or Panacea?' Address to the Australian Association of TAFE Principals' Meeting, Melbourne, January 1990.

Hall, W.C.

- 'An investigation into the teaching of the social implications of technological change'. Australian Association for Research in Education Annual Conference, November 1989.
- Broadcasts regularly on ABC Radio National.

Hayton, G.

- 'Industry Restructuring and TAFE'. Paper presented to Annual Conference of College Council, Broadmeadows College of TAFE, Ballarat, July 1989.
- TAFE as a service in industry restructuring'. Paper presented at the National Conference: Electricity Supply Industry Restructuring and Training, Canberra, May, 1990.

Jones, M.

- 'Country paper'. Paper presented at the Fourth Meeting of the Asian and Pacific Skill Development Information Network (APSDIN), Chiba, Japan, March 1990.

Mageean, P.

- 'Under-represented rural groups' access to further education'. Paper presented to SPERA Conference, James Cook University, Townsville, July 1989.
- Represented the Centre at the 'Employment and Skills Formation Workshop on Industry/TAFE Collaboration'. Melbourne, October 1989.

. 'The Implications for TAFE of the Government's New Economic Policies'. Paper presented at the Australian Association for Educational Research Annual Conference, Adelaide, November 1989.

. 'Peer Appraisal for TAFE College Executives'. Paper presented at AATP Conference, Melbourne, January 1990.

. 'Women, Enterprises and TAFE'. Keynote address at Rural Women's Enterprise Conference, Tasmania, May 1990.

Thomson, P.

. 'Assessing experience'. Opening address at Assessment Standards in Business Studies, Adelaide College of TAFE, Adelaide, July 1989.

. 'What value has experience?' Paper presented at the International Association for Educational Assessment, Sydney, November 1989.

10. Papers published in other journals

Staff regularly publish articles in the Centre's journal *Australian Journal of TAFE Research and Development*. Papers published in other journals include:

Dean, S. and Thomson, P.

- 'We're fashioning tests' in the Australian TAFE Teacher, Vol. 24, No. 2, pp. 48-49.

Hall, W.C.

- 'Teaching the social implications of technological change' in the Further Education Unit Technology Digest, No. 2, pp. 11-15.
- 'Eight steps to a new industrial landscape' in The Australian TAFE Teacher, Vol. 24, No. 2, pp. 44-45.

Hall, W.C. and Hayton, G.

- 'Getting ready for the restructuring' in The Australian TAFE Teacher, Vol. 23, No. 4, pp. 17-19.

Hayton, G.

- 'Training models for the building industry' in The Australian TAFE Teacher, Vol. 24, No. 1, p. 57.

Jones, M.

- TAFE National Clearinghouse update: ALIA/TAFE National Newsletter, April 1990.

Mageean, P.

- 'The implications for tertiary vocational education of the government's emphasis upon skills formation' in Prometheus, Vol. 7, No. 2.

Thomson, P.

- 'What is competence?' in The Australian TAFE Teacher, Vol. 24, No. 1, p.55.